

Remarks/Arguments:

Applicants thank Examiner Goff for his careful examination of this application and his clear explanation of the claim rejections and the objections. In response, applicants cancel claims 5-20 and amend claim 2, adding the term millimeter, to overcome the objections. Regarding the obviousness rejection against claims 1-4, applicants respectfully submit that because the cited references do not disclose all the claim elements, the Office Action fails to establish a prima facie case of obviousness and the rejections are therefore improper.

Claims 1, 3, 4, stand rejected under 35 U.S.C. 103(a) as being unpatentable over Imanishi et al. (US 6,206,066) in view of Kudoh et al. (US 4,656,048), Shinohara et al. (JP 57085250 and the abstract), and Sheppard et al. (US 6,284,569). Among this group, claim 1 is an independent claim.

Claim 1 describes a method for attaching a die to a substrate. The method includes the step of attaching a die to the epoxy region, a length of the die approximately equal to the length of the rectangular aperture. Imanishi not only does not disclose this step, it in fact teaches away from this step.

Imanishi discloses a method for mounting an electronic component at a specified position of an object. The electronic component has electrode parts (bumps) to be bonded with the electrode parts of the circuit board. It is well known in the art of manufacturing electronic components that the electrode parts occupy a significant portion of the surface area to be bonded to the circuit board.

In describing the method for mounting an electronic component, Imanishi cautions that a sealant is to be applied "in a manner to avoid an electrode part of the object."¹ It is so that "[a]s a result, the bonding operation can be performed while the

¹ US 6,206,066, abstract, also see, col. 2, ll. 17-18, 54-55; col. 3, ll. 42-43; col. 8, 25-26..

electrodes of the electronic component and the object confront each other without being disturbed by the sealant.”²

It is also well known in the art of manufacturing electronic components that the position of the electrode parts in the circuit board mirror the position of the electrode parts in the electronic components. Because Imanishi teaches applying the sealant in a manner to avoid the electrode parts of the object, the sealant must be restricted to an area of the size of the electronic component minus the area of the electrode parts. Hence the area is substantially smaller than the area of the electronic component. Had Imanishi’s method included the step of “attaching a die to the epoxy region, a length of the die approximately equal to the length of the rectangular aperture,” the sealant would have covered the electrode parts of the circuit board and interfered with the bonding between the component and the object.

Because Imanishi does not disclose at least this step of claim 1 and because combining this step would have destroyed the intended function of the Imanishi method, applicants respectfully submit that Imanishi alone or in combination with additional known art can not render claim 1 obvious.

Claim 1 further stands rejected provisionally on the ground of non-statutory obviousness-type double patenting as being unpatentable over claim 13 of a copending Application No. 10/851,552 in view of Kudoh et al, Shinohara et al., and Sheppard et al.

Claim 13 of the copending application No. 10/851,552 is copied below:

A method for coupling electronic devices, comprising:
providing an electronic device having a region to be coupled to another device using an adhesive substance, the region having a first shape;
forming a mound of the adhesive substance, the mound having a footprint, the footprint having a second shape that is approximately equal to the first shape; and

² Id. col. 4, ll. 31-34.

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coupling the electronic device to a target area of a platform by positioning the mound over the target area and directly under the region of the electronic device.

It is clear that claim 13 does not include a step of "attaching a die to the epoxy region, a length of the die approximately equal to the length of the rectangular aperture."

And there is no evidence set forth in the Office Action that any of the other references disclose this step either. Therefore, applicants respectfully submit that the Office Action fails to establish a prima facie case of obviousness against claim 1 of this application.

Claims 2-4

Claims 2-4 properly depend from claim 1. Since claim 1 is not rendered obvious over the cited references, applicants respectfully submit that claims 2-4 must also not be rendered obvious.

In summary, applicants respectfully submit that this application is now in allowable form and the pending claims 1-4 stand patentable.

Respectfully submitted,

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